The Arrival of the Fingerprint Smartcard!

Presented by:

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Biometric Associates, Inc.
Fingerprint ID Modules

What is a Fingerprint Smartcard?

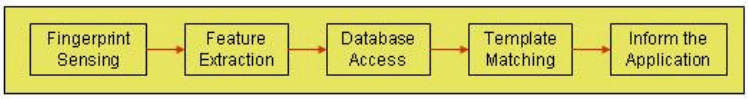
A fingerprint biometric verifies the identity of its authorized user before unlocking the protected smartcard functions

The card then operates like an ordinary ISO 7816 smartcard.

Why do it all on the card

- ***Simplify deployment*** by incorporating the entire biometric system on the card.
- ***Improve security*** by eliminating points of attack between elements of the system
- ***Prevent vandalism*** at public portals by protecting the sensor within the user's card
- ***Increase acceptance*** by users – the fingerprints never leave the smartcard
- ***Minimize cost*** by mass-producing the biometric module

Is it the most secure authentication?



- Traditional biometric processing steps expose the intermediate points to attack
- The fingerprint smartcard combines all of the elements into one secure integrated module
- PKI security is provided with up to 2048 bit keys
- Enrollment and serialization is securely controlled
- The card communicates using ISO 7816 commands

How does it change our world?

- Highest security – up to 2048 bit RSA
- Fast recognition – fraction of a second
- Up to 10 fingers per card
- No change to existing smartcard applications
- Designed for mass production
- Will become the cheapest biometric device

Developed as an international partnership

Biometric Associates, Inc.

Developed By:

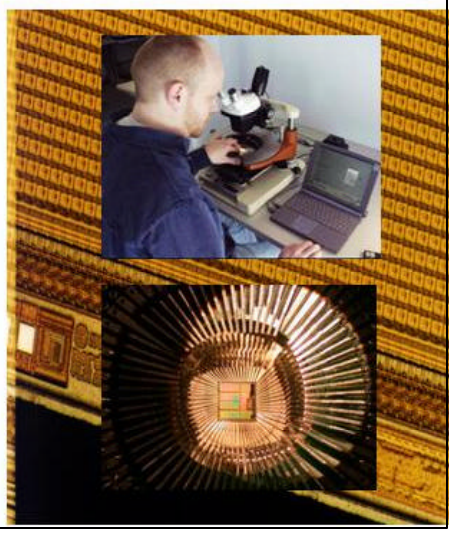
With Sensor Technology From: FINGERPRINT CARDS

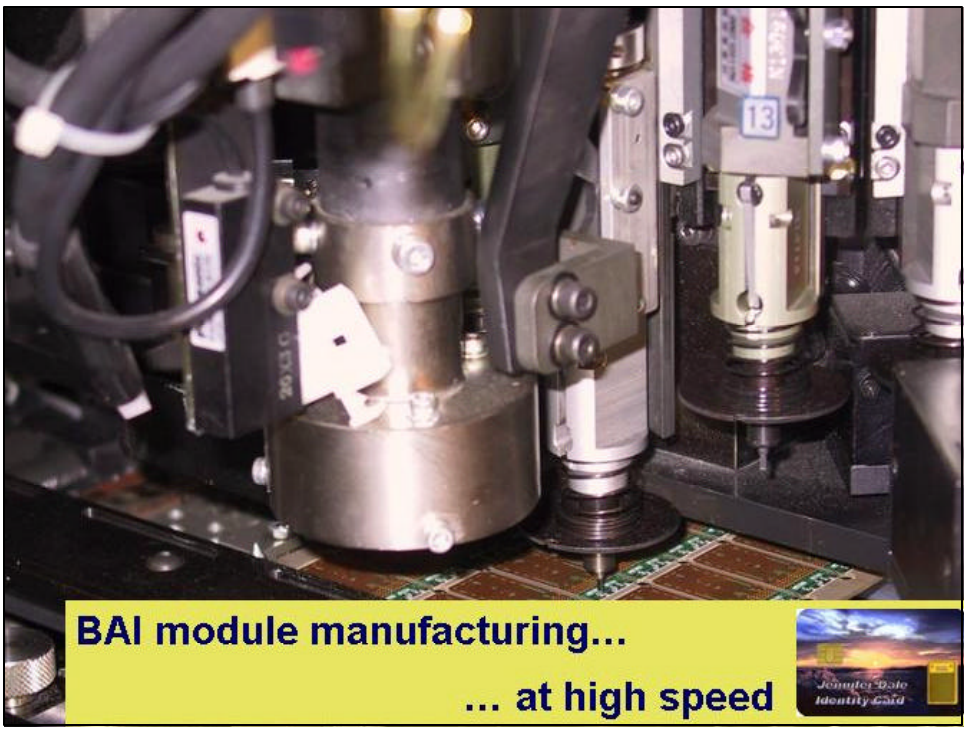
Manufactured By: Novacard

www.biometricassociates.com

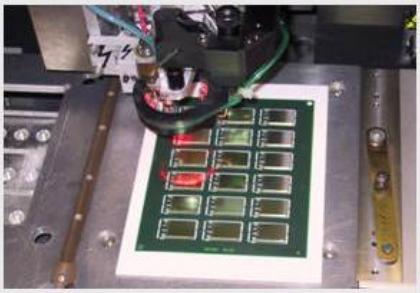
Biometric Associates, Inc

- First company to produce self-authenticating fingerprint cards
- Manufactures thin fingerprint modules
- Integrates the cards into secure systems

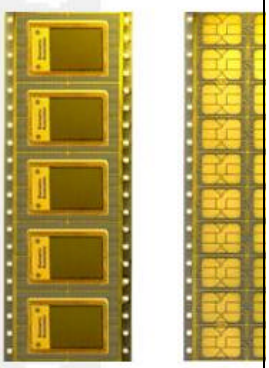




BAI production ---
--- *at automated facilities*



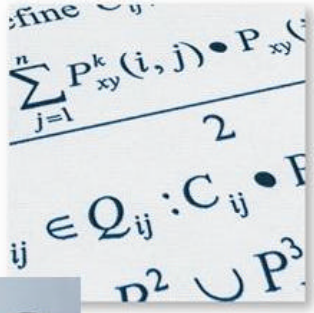
Specialized BAI Technology



- Complete biometric system in an embedded module
- Embeddable into smartcards in existing facilities
- Can use existing card readers and programs
- No change to the existing smartcard infrastructure
- Programmed cryptographic exchange and PKI
- Provides the highest levels of security

Fingerprint Cards, AB

- Developed compact algorithm and sensor technology
- Granted important patents on fingerprint authentication



Novacard, GmbH

- Manufacturer of high-quality cards
- Automated smartcard manufacturing

Automatic Card Production

The BAI Fingerprint Module and Smartcard Module are automatically cemented into place.

Automatic Card Production

The pre-punched top cover is laminated to the bottom layer. The pads will be connected to the modules with conductive dots.

Automatic Card Production

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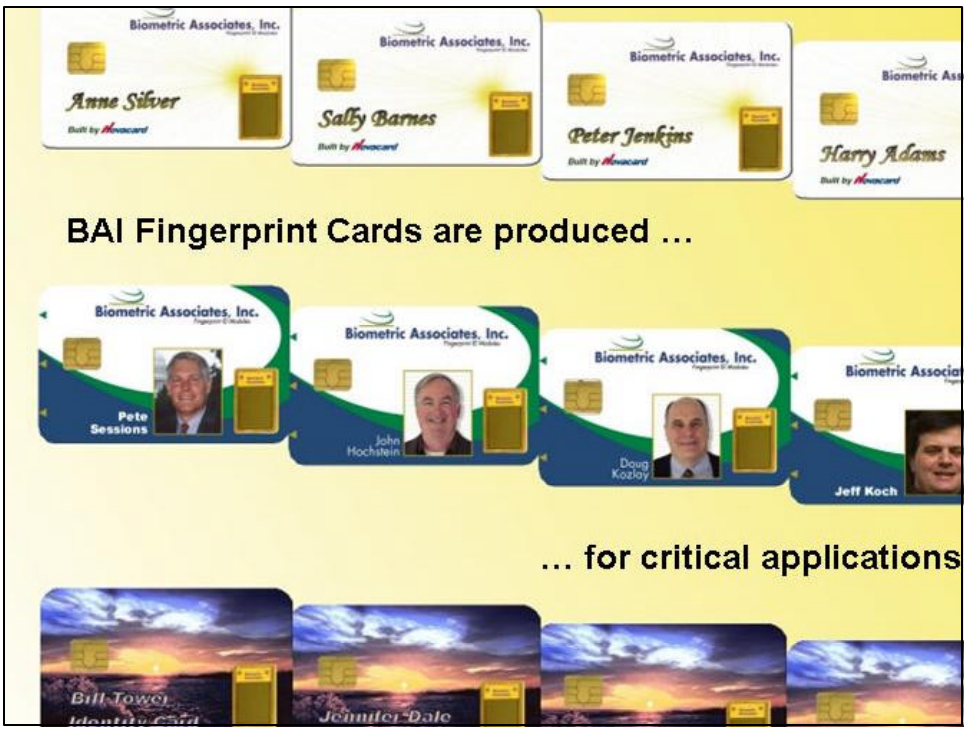

Critical Applications for Identity Assurance

Access to facilities
- airplanes
- cars
- buildings

Access to applications
- financial systems
- electronic funds transfers
- health insurance
- driver's licenses
- electronic voting

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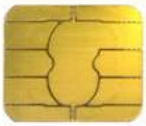

Fingerprint enabled cards are now in production